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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,929	11/04/2003	Martin Hoppe	21295.70 (H5704US)	5952
29127	7590	08/23/2005	EXAMINER	
HOUSTON ELISEEVA 4 MILITIA DRIVE, SUITE 4 LEXINGTON, MA 02421			PYO, KEVIN K	
			ART UNIT	PAPER NUMBER
			2878	

DATE MAILED: 08/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/700,929

Applicant(s)

HOPPE ET AL.

Examiner

Kevin Pyo

Art Unit

2878

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 14-16 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 and 17-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 11/4/03; 5/21/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. The Examiner has considered applicant's arguments accompanying applicant's election with traverse of Group I, claims 1-8 and 14-16. However, the Examiner notes the inadvertent inclusion of claim 8 in Group I. Claim 8 is directed to stimulation for causing the positional change and therefore should have been included in Group II. Accordingly, claim 8 will be withdrawn from consideration.

Applicant argues that no new search will be required for searching all groups of claims and that no undue burden will be imposed on the Patent Office. The Examiner disagrees with this argument. The fact that the search for different species overlaps does not necessarily eliminate a serious burden in examining different species.

In response to applicant's argument that the two groups are not independent, it was not found persuasive because the Election of Species requirement issued on 5/4/2005 is based on the fact that the claimed invention has patentably distinct species, not the criteria under MPEP 802.01. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either case, if the Examiner finds one of the inventions unpatentable over the prior art, the evidence of admission may be used in a rejection under 35 USC 103(a) of the other invention.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 7 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finarov (5,604,344).

Regarding claim 1, Finarov shows in Fig.3 the following elements of applicant's invention: a) focusing a microscope (the microscope of Fig.3) onto a tissue layer in living thing (16; col.5, lines 20-22); b) generating signals (by a CCD 70) that correspond to the positional changes of the tissue layer brought by movements of the living thing (col.5, lines 20-22) or generating signals that indicate the beginning of a positional change (col.3, lines 28-32); c) acquiring images (by a CCD at the image plane 14; col.6, lines 61-62) or performing optical measurements even during the positional changes (col.2, lines 25-27; col.5, lines 60-64); and d) processing the signals in such a way the positional changes are compensated for in real time and the tissue layer being investigated is thereby always in focus (the autofocussing unit 40, 100 compensates focusing error and controls the motor 27 in real time so that the tissue layer is always in focus). Although Finarov does not specifically mention that its living thing is an animal, those skilled in the art would recognize that animals (i.e. mice) are an important part of the class of living things which the microscope of Finarov was applicable to in view of the important research work on such creatures. Therefore, it would have been obvious to one of ordinary skill in the art to identify an animal specifically among the living things which are studied using the device of Finarov.

Regarding claim 2, the limitation therein is disclosed in col.5, lines 60-64.

Regarding claim 3, Finarov differs from the claimed invention in that it does not specifically mention the use of a laser. However, the specific light source utilized would have been obvious to one of ordinary skill in the art in view of design requirements and the desired performance.

Regarding claim 7, Finarov discloses that the autofocussing unit (40, 100) compensates focusing error and controls the motor (27) in real time so that the tissue layer is always in focus.

Regarding claim 14, Finarov differs from the claimed invention in that it does not disclose a memory for storing signals for later evaluation. However, the use of a memory for storing signals is well known in the art and it would have been obvious to one of ordinary skill in the art to utilize a memory in the device of Finarov in view of the desire to perform archiving, supervision or training.

Regarding claim 15, Finarov discloses an autofocusing unit (40, 100).

Regarding claim 16, Finarov discloses movement measuring means (70).

4. Claims 4 and 5 rejected under 35 U.S.C. 103(a) as being unpatentable over Finarov in view of the publication entitled "Circulatory microscopy on the mesenterium and pancreas in living rabbits" (hereinafter REF).

Regarding claims 4 and 5, although Finarov does not specifically mention a source for causing a living animal to move by itself, a source causing the movement of a living animal would be pulse or respiration as disclosed by REF (see page 11, lines 8-10 of the English translation of REF). Therefore, it would have been obvious to one of ordinary skill in the art to identify a pulse (i.e. heartbeat) as the source of movement in a living thing which the microscope of Finarov corrects for.

Allowable Subject Matter

5. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art fails to disclose or make obvious a method for investigating at least one tissue layer in living animal using a microscope comprising, in addition to other recited steps of the claim, the step of measuring the positional changes of the tissue layer in advance in order to perform calibration.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cane et al (US 2001/0056237) is cited for disclosing a method and an apparatus for investigating a tissue sample.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Pyo whose telephone number is (571) 272-2445. The examiner can normally be reached on Mon-Fri (with flexible hour), First Mon. off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David P. Porta can be reached on (571) 272-2444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin Pyo
Primary Examiner
Art Unit 2878

Pkk
8/18/05